California Regional Water Quality Control Board

Los Angeles Region

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And

United States Environmental Protection Agency

Region IX

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ORDER NO. R4-2006-0067
NPDES NO. CA0063401

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Discharger	**West Basin Municipal Water District**
Name of Facility	**West Basin Water Recycling Plant, El Segundo**
Facility Address	**1935 Hughes Way**
	El Segundo, CA 90245
	Los Angeles County

The Discharger is authorized to discharge from the following discharge point as set forth below:

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001*	Brine waste from reverse osmosis treatment	33º 54' 43" N	118º 31' 17" W	Pacific Ocean

* Discharge Point 001 in the Order corresponds to the Outfall No. 002 (5-mile Outfall) in the Hyperion Treatment Plant's NPDES permit (CA0109991) reissued in 2005.

This Order was adopted by the Regional Water Board on:	**August 3, 2006**
This Order shall become effective on:	**September 18, 2006**
This Order shall expire on:	**September 17, 2011**
The USEPA and the Regional Water Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the Order expiration date as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that Order No. 00-091 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

The signatures below certify that the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on August 3, 2006, and of a National Pollutant Discharge Elimination System permit issued by the United States Environmental Protection Agency, Region IX, on the date below.

Original Signed By

_____

Jonathan S. Bishop,
Executive Officer
California Water Quality Control Board
Los Angeles Region

Date: ___August 16, 2006____

Original Signed By

_____

Alexis Strauss,
Director
Water Division
USEPA Region IX

Date: __August 11, 2006_

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 4, LOS ANGELES REGION
AND
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IX

ORDER NO. R4-2006-0067
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I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Table 1. Facility Information

Discharger	**West Basin Municipal Water District**
Name of Facility	**West Basin Water Recycling Plant, El Segundo**
Facility Address	**1935 Hughes Way**
	El Segundo, CA 90245
	Los Angeles County
Facility Contact, Title, and Phone	**Uzi Daniel, Water Quality Analyst, (310) 660-6245**
Mailing Address	**17140 South Avalon Blvd., Carson, CA 90746**
Type of Facility	**Water Recycling Facility**
Facility Design Flow	**4.5 Million Gallons Per Day (MGD) discharge of waste brine.**

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board) and U.S. Environmental Protection Agency (hereinafter USEPA), find:

A. **Background.** West Basin Municipal Water District (hereinafter Discharger) is currently discharging under Order No. 00-091 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0063401. The Discharger submitted a Report of Waste Discharge, dated January 5, 2005, and applied for a NPDES permit renewal to discharge up to 4.5 MGD of waste brine from the West Basin Water Recycling Plant, hereinafter Facility. The application was deemed complete on May 10, 2005.

B. **Facility Description.** The Discharger owns and operates the West Basin Water Recycling Plant located at 1935 Hughes Way, El Segundo, California. The Facility provides additional treatment to a portion of the secondary treated wastewater from the City of Los Angeles Hyperion Treatment Plant for use as Title 22 irrigation water; boiler feedwater for Chevron, El Segundo Refinery boilers; and for use in the West Coast Basin Barrier Project. The Facility has a total treatment design capacity of 37.5 MGD and discharges approximately 2.75 MGD of reverse osmosis brine waste from the treatment process to the Pacific Ocean via the Hyperion 5-mile outfall. Brine waste is not treated prior to discharge. Annual effluent flows from Hyperion are approximately 330 MGD.

   The Discharger began an expansion project at the Facility in September 2005 to increase the amount of recycled water for the West Coast Basin Barrier Project from 7.5 MGD to 12.5 MGD and increase the capacity of the Title 22 process train from 30 MGD to 40 MGD. The Discharger has requested an increase of flow for the discharge of waste brine, from 2.75 MGD to 4.5 MGD to accommodate the expansion.

C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC. It shall serve as a NPDES permit pursuant to section 402 of the Federal CWA for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

D. **Background and Rationale for Requirements**. The Regional Water Board and USEPA developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through special studies. Attachments A through F, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.

E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Table A of the Ocean Plan and in accordance with 40 CFR §125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. **Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.

H. **Water Quality Control Plans.** In accordance with legislative policy set forth in Section 13000 of Division 7 of the CWC, and pursuant to the authority contained in Section 13170 and 13170.2, the USEPA approved the 2005 Ocean Plan on February 14, 2006. The 2005 Ocean Plan amendments were previously adopted by the State Water Resources Control Board on January 20, 2005 and April 21, 2005, and by the California Office of Administrative Law on October 12, 2005. The Ocean Plan was amended to address reasonable potential and Areas of Special Biological Significance. The Ocean Plan contains water quality objectives and beneficial uses for the ocean waters of California. The beneficial uses of State ocean waters to be protected are summarized below:

Table 2. Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use
001	Pacific Ocean	Industrial Water Supply; Water Contact and Non-Contact Recreation, Including Aesthetic Enjoyment; Navigation; Commercial and Sport Fishing; Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species; Marine Habitat; Fish Migration; Fish Spawning and Shellfish Harvesting

In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

I. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution No. 68-16.

J. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

N. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The

Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

O. **Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board, together with USEPA, has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).

P. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards become effective for CWA purposes (40 CFR §131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

Q. **Notification of Interested Parties.** The Regional Water Board and USEPA have notified the Discharger and interested agencies and persons of their intent to prescribe Waste Discharge Requirements and an NPDES permit for the discharge and have provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.

R. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

S. **401 Certification.** The Regional Water Board has determined that its joint issuance of this NPDES permit with USEPA serves as its certification under Section 401 of the CWA that any discharge pursuant to this permit will comply with the CWA provisions at 33 U.S.C. 1311, 1312, 1313, 1316, and 1317.

T. **Magnuson-Stevens Fishery Conservation and Management Act (MSA) and Endangered Species Act (ESA).** USEPA's reissuance of an NPDES permit is subject to requirements of the MSA and section 7 of the ESA. On February 9, 2004, USEPA requested updated information related to: (1) essential fish habitat and managed and associated species, and (2) threatened and endangered species and their designated critical habitats, in the vicinity of the Hyperion Treatment Plant outfalls from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the Services). Based on this and other relevant information, USEPA is evaluating whether there are effects on essential fish habitat and managed and associated species protected under the MSA, or on threatened and endangered species and their designated critical habitats protected under the ESA. Based on the outcome of this analysis, USEPA may engage in consultation with the Services during, and subsequent to, this permit reissuance. USEPA may decide that changes to the permit are warranted based on the results of the completed consultation, and a reopener provision to this effect has been included in the Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged shall be limited to a maximum of 4.5 MGD of reverse osmosis brine waste as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.

B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the Pacific Ocean, a storm drain system, or other waters of the State, are prohibited.

C. The discharge of effluent from the Discharger's facilities through Discharge Point 001 shall comply with the following:

1. Waste management systems that discharge to the Pacific Ocean through Discharge Point 001 must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

2. Waste discharged to the Pacific Ocean through Discharge Point 001 must be essentially free of:

   a. Material that is floatable or will become floatable upon discharge.

   b. Settleable material or substances that may form sediments, which will degrade benthic communities or other aquatic life.

   c. Substances, which will accumulate to toxic levels in marine waters, sediments, or biota.

   d. Substances that significantly decrease the natural light to benthic communities and other marine life.

   e. Materials that result in aesthetically undesirable discoloration of the ocean surface.

3. Waste effluents from the Discharger's Facilities shall be discharged through Discharge Point 001 in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.

4. The location of waste discharges from the Discharger's Facilities shall assure that:

   a. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body contact sports.

   b. Natural water quality conditions are not altered in areas designated as being areas of special biological significance or areas that existing marine laboratories use as a source of seawater.

   c. Maximum protection is provided to the marine environment.

5. Waste that contains pathogenic organisms or viruses shall be discharged from the Facility through Hyperion Outfall 002 a sufficient distance from shellfishing and water contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are

such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard shall be used.

D. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by section 13050 of the CWC.

E. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

F. The discharge shall not cause a violation of any applicable federal CWA water quality requirements, or water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board and USEPA will revise and modify this Order in accordance with such more stringent standards.

G. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

H. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. The discharge of reverse osmosis brine waste shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location M-001 as described in the attached MRP (Attachment E):

Table 3. Final Effluent Limitations

Parameter	Units	Effluent Limitations					
		6-Month Average	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	--	25	40	--	--	75
	lbs/day[1]	--	940	1,500	--	--	2,800
pH	standard units	--	--	--	--	6.0	9.0
Temperature	°F	--	--	--	100[2]	--	--
Total Suspended Solids	mg/L	--	60	--	--	--	--
	lbs/day[1]	--	2,300	--	--	--	--
Ammonia	mg/L	450	--	--	11,000	--	--
	lbs/day[1]	17,000	--	--	410,000	--	--
Settleable Solids	ml/L	--	1.0	1.5	--		3.0

Parameter	Units	Effluent Limitations					
		6-Month Average	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Turbidity	NTU	--	75	100	--	--	225

[1] Based on a maximum flow of 4.5 MGD.
[2] The temperature of waste discharged shall not exceed 100°F, which takes into account the very large dilution credit based upon BPJ.

V. RECEIVING WATER LIMITATIONS

Unless specifically excepted by this Order, the discharge shall not cause violation of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed.

A. Bacterial Characteristics

1. Water Contact Standards

a. State/Regional Water Board Water Contact Standards

In marine water designated for water contact recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water outside the initial dilution zone.

Geometric Mean Limits
(1) Total coliform density shall not exceed 1,000/100 ml.
(2) Fecal coliform density shall not exceed 200/100 ml.
(3) Enterococcus density shall not exceed 35/100 ml.

Single Sample Maximum (SSM)
(4) Total coliform density shall not exceed 10,000/100 ml.
(5) Fecal coliform density shall not exceed 400/100 ml.
(6) Enterococcus density shall not exceed 104/100 ml.
(7) Total coliform density shall not exceed 1,000/100 ml, when the fecal coliform/total coliform ratio exceeds 0.1.

In addition, total coliform density shall not exceed 1,000/100 ml for more than 20 percent of the samples at any sampling station in any 30-day period.

b. Department of Health Services (DHS) Standards

DHS has established minimum protective bacteriological standards for coast water adjacent to public beaches and for public water contact sports areas in ocean waters. These standards are found in the California Code of Regulations, title 17, section 7958, and they are identical to the objectives contained in subsection a. above. When a public beach or public water contact sports area fails to meet these standards, DHS or the local public health officer may post with warning signs or otherwise restrict use of the public beach or public water contact sports area until the standards are met. The DHS regulations impose more frequent monitoring and more stringent posting and closure

requirements on certain high-use public beaches that are located adjacent to a storm drain that flows in the summer.

For beaches not covered under AB 411 regulations, DHS imposes the same standards as contained in Title 17 and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

2. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the waste discharged shall not cause the following bacterial standards to be exceeded:

The median total coliform density for any 6-month period shall not exceed 70 per 100 ml, and not more than 10 percent of the samples during any 6-month period shall exceed 230 per 100 ml.

3. Implementation Provisions for Bacterial Characteristics

a. At a minimum, weekly samples shall be collected from each site. The geometric mean values should be calculated using the five most recent sample results. If sampling occurs more frequently than weekly, all samples taken during the previous 30-day period shall be used to calculated the geometric mean.

b. If a single sample exceeds any of the single sample maximum (SSM) standards, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued until the sample result is less than the SSM standard or until the Regional Water Board requires the Discharger or appropriate agency to conduct a sanitary survey to determine the source of the high bacterial densities. A sanitary survey shall also be required if three out of four weekly samples exceed any SSM standard, or if 75 percent of the samples from more frequent testing during any 30-day period exceed any SSM standard.

When repeat sampling is required because of an exceedance of any one single sample density, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

c. It is state policy that the geometric mean bacterial objectives are strongly preferred for use in water body assessment decisions, for example, in developing the Clean Water Act section 303(d) list of impaired waters, because the geometric mean objectives are a more reliable measure of long-term water body conditions. In making assessment decisions on bacterial quality, single sample maximum data must be considered together with any available geometric mean data. The use of only single sample maximum bacterial data is generally inappropriate unless there is a limited data set, the water is subject to short-term spikes in bacterial concentrations, or other circumstances justify the use of only single sample maximum data.

B. Physical Characteristics

1. Floating particulates and grease and oil shall not be visible.

2. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

3. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.

4. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

C. Chemical Characteristics

1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.

2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

4. The concentration of substances set forth in Chapter II, Table B of the Ocean Plan (2005), shall not be increased in marine sediments to levels that would degrade indigenous biota.

5. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.

6. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

7. Numerical water quality objectives established in Chapter II, Table B of the California Ocean Plan (2005) shall not be exceeded outside of the zone of initial dilution as a result of discharges from the Facility.

D. Biological Characteristics

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

3. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

E. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

   a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR §§122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

   b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board or USEPA to local agencies.

   c. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.

   d. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

   e. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

   f. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

   g. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

      (1) Violation of any term or condition contained in this Order;
      (2) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

(3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

h. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

i. The Discharger shall notify the Regional Water Board and USEPA not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

j. The Discharger shall file with the Regional Water Board and USEPA a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

k. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board and USEPA as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

l. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board and USEPA of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board and USEPA.

m. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

n. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

o. The Discharger shall notify the Executive Officer and USEPA in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer and USEPA, which may be toxic to aquatic life. Such notification shall include:

(1) Name and general composition of the chemical,
(2) Frequency of use,
(3) Quantities to be used,

(4) Proposed discharge concentrations, and
(5) USEPA registration number, if applicable.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

C. Special Provisions

1. Reopener Provisions

a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board and USEPA will revise and modify this Order in accordance with such more stringent standards.

b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.

c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new MLs.

d. This Order may be reopened and modified to revise effluent limitations as a result of future Ocean Plan Amendments.

e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board and USEPA, to provide for dilution credits, as may be appropriate.

f. This Order may be reopened and modified to incorporate additional monitoring requirements and/or WQBELs for effluents discharged through Discharge Point 001, based on the results of the special study for chronic toxicity.

g. This Order may be modified, or revoked and reissued, based on the results of Magnuson-Stevens Conservation and Management Act and/or Endangered Species Act section 7 consultations(s) with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. **Chronic Toxicity Special Study**

During years two (2007) and three (2008) of the tenure of this Order, the permittee shall conduct a special study to evaluate chronic toxicity levels of the combined West Basin Water Recycling Plant and Hyperion Treatment Plant effluents following initial mixing with the receiving waterbody, under critical dilution conditions.

The permittee, in coordination with the City of Los Angeles, Hyperion Treatment Plant, shall prepare a detailed workplan for this special study describing the steps the permittee will follow to measure the chronic toxicity of the combined effluents, under critical dilution conditions. This workplan should include the elements specified below. Within 180 days of the effective date of this Order, the permittee shall submit their detailed workplan for this special study to the Regional Board Executive Officer and USEPA Water Division Director for review and approval. The workplan shall be immediately implemented by the permittee following approval by the Executive Officer and Director.

As part of this special study, beginning in year two (2007) of the tenure of this Order, the permittee shall conduct bimonthly chronic toxicity tests on 24-hour composite effluent samples collected at Monitoring Location M-001, for an 14-month period. This testing shall be conducted concurrently with the whole effluent chronic toxicity testing required by the Hyperion Treatment Plant permit (NPDES No. CA0109991 reissued in 2005). During this study period, a split of each combined effluent for chronic toxicity testing shall be analyzed for all monitored parameters specified by Table E-2 in Attachment E - Monitoring and Reporting Program No. 7449.

Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the first edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, August 1995) and the Ocean Plan (2005). The permittee shall conduct a static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01); a static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0); and a toxicity test with the invertebrate species selected from the following list and used for the biennial chronic toxicity test screening required by the Hyperion Treatment Plant permit:

Static renewal toxicity test with the mysid, *Holmesimysis costata* (Survival and Growth Test Method 1007.01);

Static non-renewal toxicity test with the Pacific oyster, *Crassostrea gigas*, or the mussel, *Mytilus* spp. (Embryo-larval Shell Development Test Method 1005.0);

Static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method);

Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dentraster excentricus* (Embryo-larval Development Test Method); or

Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0).

There are no chronic toxicity effluent limitations prescribed for the West Basin Water Recycling Plant discharge. For the combined West Basin and Hyperion Treatment Plant effluents, the chronic toxicity in-stream waste concentration (IWC) is 1.190% effluent (i.e., 100% combined effluent divided by the Hyperion 5-mile outfall dilution factor of 84). This combined effluent sample for chronic toxicity testing is a manual composite

comprised of 1.4975% West Basin brine waste effluent and 98.5025% Hyperion Treatment Plant secondary treated effluent. The Regional Water Board and USEPA have chosen these values because under critical conditions in the Hyperion 5-mile outfall, 1.4975% of the combined effluent flow is from the West Basin discharge [4.5 mgd, highest brine waste flow rate following recycling plant expansion divided by (296 + 4.5 mgd), lowest monthly average Hyperion Treatment Plant effluent flow rate and highest brine waste flow rate, x 100] and 98.5025% of the combined effluent flow is from the Hyperion discharge (100% - 1.4975%). Results shall be reported in TUc, where TUc = 100/NOEC. The No Observed Effect Concentration (NOEC) is the highest concentration of toxicant (or the maximum percent effluent) to which organisms are exposed in a short-term chronic test that causes no observable adverse effects on the test organisms (e.g., the highest concentration of toxicant in which the values for the observed responses are not statistically significantly different from the controls). A full laboratory report for all toxicity testing shall be submitted as an attachment to the quarterly self monitoring report (SMR) for the corresponding month in which the toxicity test is conducted and shall include: the toxicity test results (as TUc = 100/NOEC, NOEC, TUc = 100/EC25 or IC25, and EC25 or IC25, and Percent Effect [PE, see Attachment A for definition]) reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations. A final report summarizing the results and conclusions of this 14-month special study shall be submitted to the Regional Water Board and USEPA 18 months following the date of workplan approval by the Executive Officer and Director.

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified, below.

The chronic IWC for the combined West Basin and Hyperion Treatment Plant discharge is 1.190% effluent. The combined effluent sample for chronic toxicity testing is a manual composite comprised of 1.4975% West Basin brine waste effluent and 98.5025% Hyperion Treatment Plant secondary treated effluent. A series of at least five effluent dilutions and proper controls shall be tested. At minimum, the dilution series shall include the combined discharge IWC and two dilutions above and below this IWC.

For the combined effluents, dilution water shall be prepared as specified in the Hyperion Treatment Plant permit for conducting Hyperion Treatment Plant chronic toxicity tests. The dilution water described above and proper control waters should be prepared and used as specified in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, August 1995). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the Regional Water Board and USEPA.

If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity

tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the permittee must resample and retest within 14 days.

Because this permit requires sublethal hypothesis testing endpoints from test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, August 1995), with-in test variability must be reviewed for acceptability and a variability criterion (e.g., % MSD) must be applied, as directed under each test method.

If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the Regional Water Board and USEPA.

Where total ammonia concentrations in the effluent are $\geq$5 mg/L, toxicity may be contributed by unionized ammonia. pH drift during the toxicity test may contribute to artifactual toxicity when ammonia or other pH-dependent toxicants (e.g., metals) are present. If sample toxicity is confirmed to be artifactual and due to pH drift (as determined through parallel testing described in Section 11.3.6.1 of the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013, October 2002)), then, following written approval by the Regional Water Board and USEPA, the permittee may use procedures outlined in Section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.

Within 90 days of direction by the Regional Water Board Executive Officer and USEPA Water Division Director, the permittee shall prepare and submit for review a copy of an Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan (1-2 pages). This plan shall include steps the permittee intends to follow if toxicity is measured below the chronic IWC for the combined West Basin and Hyperion Treatment Plant discharge and should include, at minimum:

A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

As directed by the Executive Officer and Director, the permittee shall, in coordination with the City of Los Angeles, Hyperion Treatment Plant, conduct a TRE/TIE using the same species and test method(s) and, as guidance and based on the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA 833-B-99-002, August 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-

88/070, April 1989). In conjunction, the permittee, in coordination with the City of Los Angeles, Hyperion Treatment Plant, shall develop and implement a Detailed TRE Workplan which shall include: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity, using as guidance USEPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, May 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, September 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, September 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, September, 1996).

3. Best Management Practices and Pollution Prevention

The Discharger shall submit, within 90 days of the effective date of this Order:

a. An updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed as specified under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities, Order No. 97-03-DWQ (General Permit).

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP. Dischargers shall be deemed out of compliance with effluent limitations if the concentration of the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

B. Multiple Sample Data Reduction

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL).

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). However, an alleged violation of the AMEL will be considered one violation for the purpose of assessing mandatory minimum penalties. The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to effluent violation determination, and not reporting violations.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Discharger will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger shall collect up to four additional weekly samples. All analytical results shall be reported in the monitoring report for that month, or the subsequent month. The concentration of pollutant (an arithmetic mean or a median) estimated from the "Multiple Sample Data Reduction" Section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

D. Average Weekly Effluent Limitation (AWEL).

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the discharger may be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. However, an alleged violation of the AWEL will be considered one violation for the purpose of assessing mandatory minimum penalties. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week with respect to effluent violation determination, and not reporting violations.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be

reported as a weekly average or seven-day average on the SMR for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day with respect to effluent violation determination, and not reporting violations.

F. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

H. Six-month Median Effluent Limitation.

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median limitation.

I. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

K. Compliance with single constituent effluent limitations

Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant (see Section B "Multiple Sample Data Reduction" above)in the monitoring sample is greater than the effluent limitation and greater than or equal to the RML.

L. Compliance with effluent limitations expressed as a sum of several constituents

Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

M. Mass Emission Rate.

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.337}{N}\sum_{i=1}^{N} Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.785}{N}\sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be taken in any calendar day. If a composite sample is taken, 'Ci' is the concentration measured in the composite sample and 'Qi' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t}\sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of component waste streams. 'Qi' and 'Ci' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Qt' is the total flow rate of the combined waste streams.

N. Bacterial Standards and Analysis.

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

   $$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_n)^{1/n}$$

   where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.

3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR 136 (revised May 14, 1999), unless alternate methods have been approved by USEPA pursuant to 40 CFR 136, or improved methods have been determined by the Executive Officer and/or USEPA.

4. Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

O. Single Operational Upset

A single operational upset (SOU) that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

1. A single operational upset is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.

2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Provision V.E.2(b) of Attachment D – Standard Provisions.

3. For purpose outside of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).

4. For purpose of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC Section 13385 (f)(2).

ATTACHMENT A – DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

DEFINITIONS

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL): the highest allowable daily discharge of a pollutant.

µg/L: micrograms per Liter

mg/L: milligrams per Liter

MGD: million gallons per day

Percent Effect (PE): Percent Effect measures the biological effect at the in-stream waste concentration (IWC) compared to the control concentration (control) and is calculated as PE = [1-(XIWC/Xcontrol)][100], where X is the mean value for the biological endpoint at the IWC and control concentration.

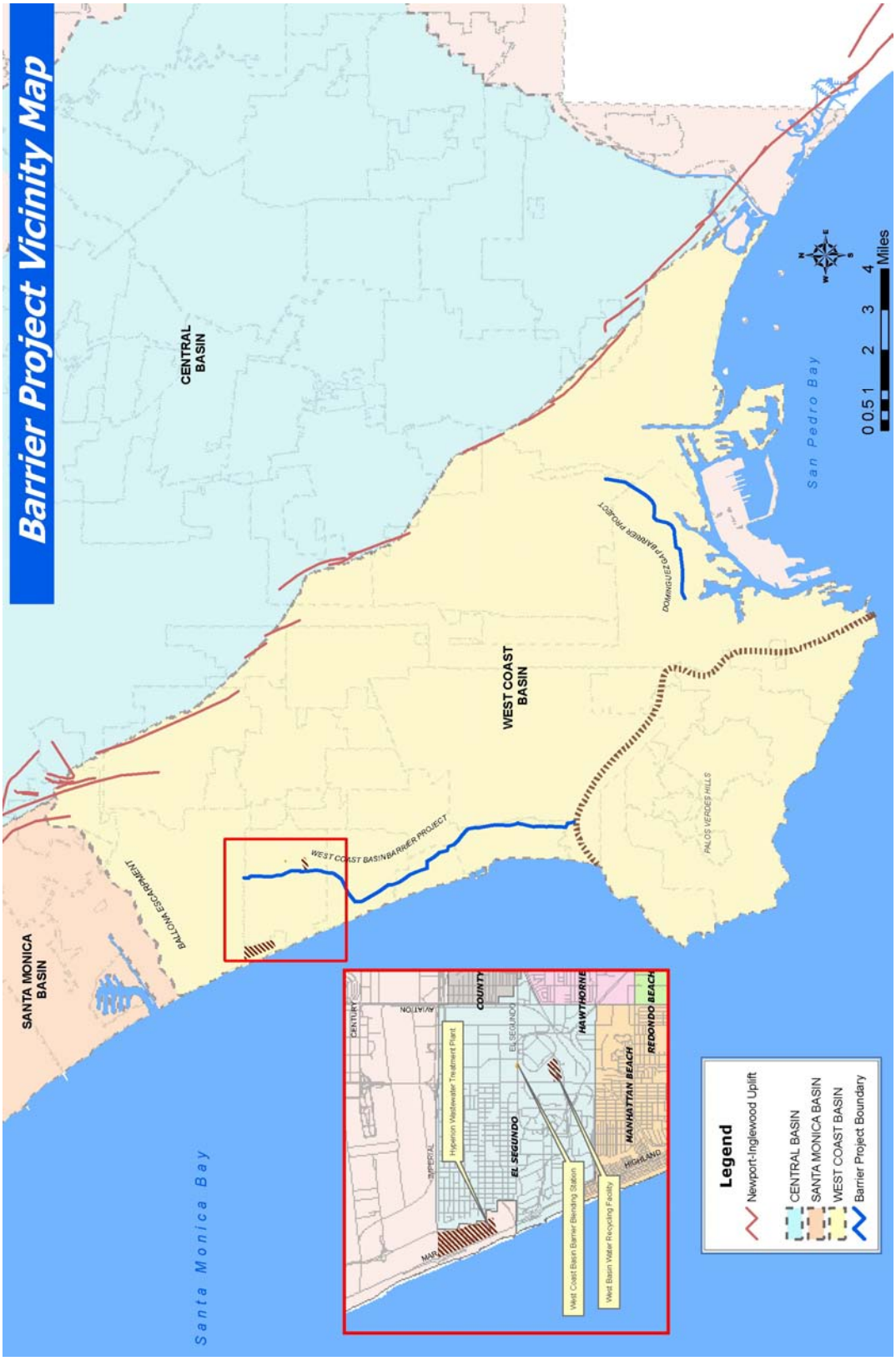
Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

ACRONYMS AND ABBREVIATIONS

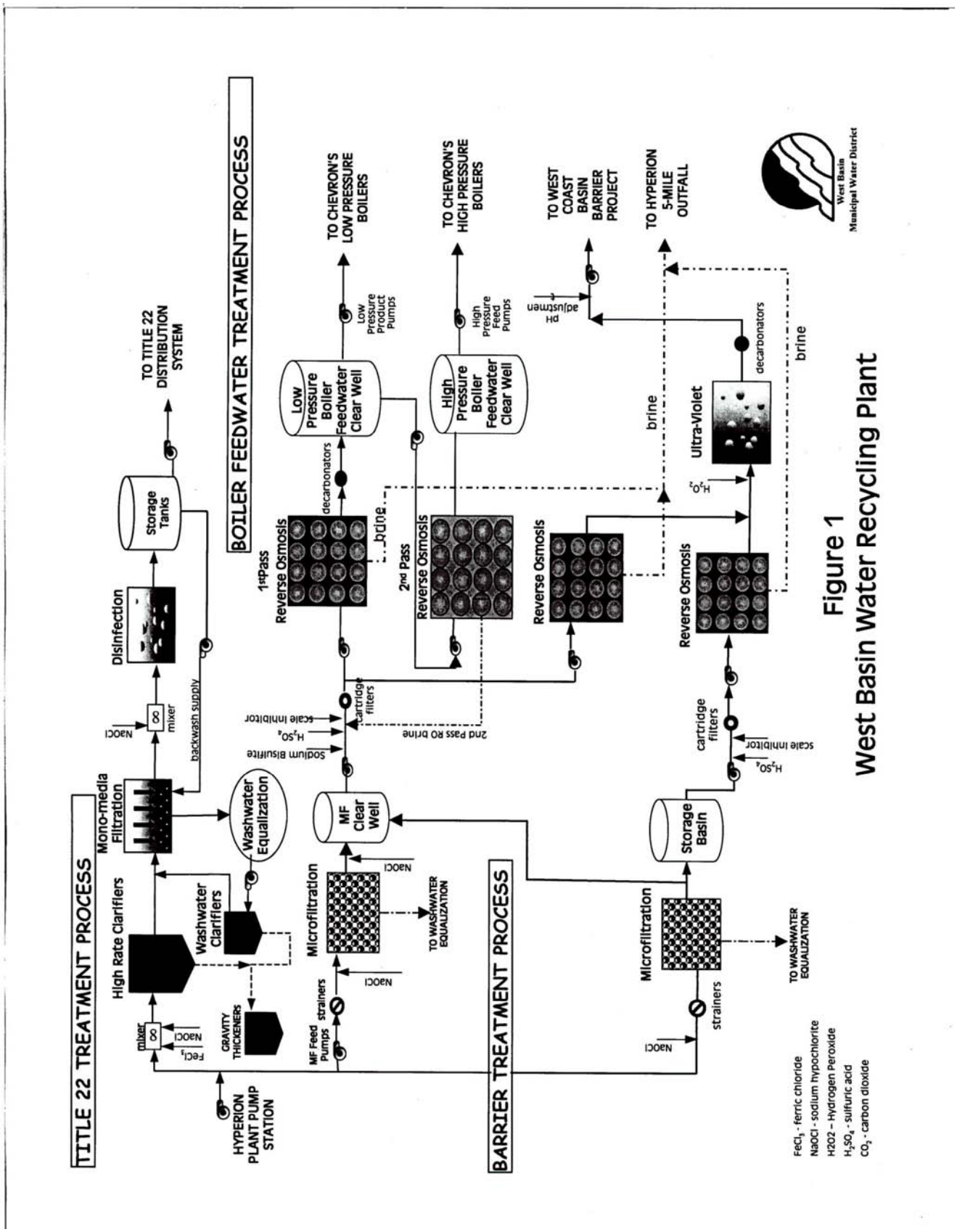
AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	*Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 ℃
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	West Basin Municipal Water District
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Health Services Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	West Basin Water Recycling Plant
gpd	gallons per day
IC	Inhibition Coefficient
IC_{15}	Concentration at which the organism is 15% inhibited
IC_{25}	Concentration at which the organism is 25% inhibited
IC_{40}	Concentration at which the organism is 40% inhibited
IC_{50}	Concentration at which the organism is 50% inhibited
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PE	Percent Effect
PMEL	Proposed Maximum Daily Effluent Limitation

PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	*Water Quality Control Plan for Ocean Waters of California*
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SIP	State Implementation Policy (*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)*
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California*
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TUa	Acute Toxicity Unit
TU_c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

ATTACHMENT B – LOCATION MAP



ATTACHMENT C – WASTEWATER FLOW SCHEMATIC



ATTACHMENT D – FEDERAL STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the CWA and the CWC and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [*40 CFR §122.41(a)*].

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not been modified to incorporate the requirement [*40 CFR §122.41(a)(1)*].

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [*40 CFR §122.41(c)*].

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [*40 CFR §122.41(d)*].

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [*40 CFR §122.41(e)*].

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [*40 CFR §122.41(g)*].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [*40 CFR §122.5(c)*].

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Resources Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [*40 CFR §122.41(i)*] [*CWC 13383(c)*]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [*40 CFR §122.41(i)(1)*];

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [*40 CFR §122.41(i)(2)*];

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [*40 CFR §122.41(i)(3)*];

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [*40 CFR §122.41(i)(4)*].

G. Bypass

1. Definitions

   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [*40 CFR §122.41(m)(1)(i)*].

   b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [*40 CFR §122.41(m)(1)(ii)*].

2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [*40 CFR §122.41(m)(2)*].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board and/or USEPA may take enforcement action against a Discharger for bypass, unless [*40 CFR §122.41(m)(4)(i)*]:

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [*40 CFR §122.41(m)(4)(A)*];

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to

prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [*40 CFR §122.41(m)(4)(B)*]; and

c. The Discharger submitted notice to the Regional Water Board and USEPA as required under Standard Provision – Permit Compliance I.G.5 below [*40 CFR §122.41(m)(4)(C)*].

4. The Regional Water Board and USEPA may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board and USEPA determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [*40 CFR §122.41(m)(4)(ii)*].

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [*40 CFR §122.41(m)(3)(i)*].

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [*40 CFR §122.41(m)(3)(ii)*].

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [*40 CFR §122.41(n)(1)*].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph H.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [*40 CFR §122.41(n)(2)*].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [*40 CFR §122.41(n)(3)*]:

a. An upset occurred and that the Discharger can identify the cause(s) of the upset [*40 CFR §122.41(n)(3)(i)*];

b. The permitted facility was, at the time, being properly operated [*40 CFR §122.41(n)(3)(i)*];

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [*40 CFR §122.41(n)(3)(iii)*]; and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [*40 CFR §122.41(n)(3)(iv)*].

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [*40 CFR §122.41(n)(4)*].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [*40 CFR §122.41(f)*].

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [*40 CFR §122.41(b)*].

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board and USEPA. The Regional Water Board and USEPA may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [*40 CFR §122.41(l)(3)*] [*40 CFR §122.61*].

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [*40 CFR §122.41(j)(1)*].

B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [*40 CFR §122.41(j)(4)*] [*40 CFR §122.44(i)(1)(iv)*].

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer and USEPA Water Division Director at any time [*40 CFR §122.41(j)(2)*].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [*40 CFR §122.41(j)(3)(i)*];

2. The individual(s) who performed the sampling or measurements [*40 CFR §122.41(j)(3)(ii)*];

3. The date(s) analyses were performed [*40 CFR §122.41(j)(3)(iii)*];

4. The individual(s) who performed the analyses [*40 CFR §122.41(j)(3)(iv)*];

5. The analytical techniques or methods used [*40 CFR §122.41(j)(3)(v)*]; and

6. The results of such analyses [*40 CFR §122.41(j)(3)(vi)*].

C. Claims of confidentiality for the following information will be denied [*40 CFR §122.7(b)*]:

1. The name and address of any permit applicant or Discharger [*40 CFR §122.7(b)(1)*]; and

2. Permit applications and attachments, permits and effluent data [*40 CFR §122.7(b)(2)*].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [*40 CFR §122.41(h)*] [*CWC 13267*].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [*40 CFR §122.41(k)*].

2. All permit applications shall be signed as follows:

   a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [*40 CFR §122.22(a)(1)*];

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [*40 CFR §122.22(a)(2)*]; or

c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [*40 CFR §122.22(a)(3)*].

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in paragraph (b) of this provision, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in paragraph (2.) of this provision [*40 CFR §122.22(b)(1)*];

   b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [*40 CFR §122.22(b)(2)*]; and

   c. The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [*40 CFR §122.22(b)(3)*].

4. If an authorization under paragraph (3.) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board, or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].

5. Any person signing a document under paragraph (2.) or (3.) of this provision shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [*40 CFR §122.22(d)*].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP in this Order [*40 CFR §122.41(l)(4)*].

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board or USEPA for reporting results of monitoring of sludge use or disposal practices [*40 CFR §122.41(l)(4)(i)*].

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board and USEPA [*40 CFR §122.41(l)(4)(ii)*].

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [*40 CFR §122.41(l)(4)(iii)*].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [*40 CFR §122.41(l)(5)*].

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [*40 CFR §122.41(l)(6)(i)*].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [*40 CFR §122.41(l)(6)(ii)*]:

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order [*40 CFR §122.41(l)(6)(ii)(A)*].

   b. Any upset that exceeds any effluent limitation in this Order [*40 CFR §122.41(l)(6)(ii)(B)*].

   c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [*40 CFR §122.41(l)(6)(ii)(C)*].

3. The Regional Water Board and USEPA may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [*40 CFR §122.41(l)(6)(iii)*].

F. Planned Changes

The Discharger shall give notice to the Regional Water Board and USEPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [*40 CFR §122.41(l)(1)*]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [*40 CFR §122.41(l)(1)(i)*]; or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 CFR Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [*40 CFR §122.41(l)(1)(ii)*].

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [*40 CFR §122.41(l)(1)(iii)*].

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board or USEPA of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [*40 CFR §122.41(l)(2)].*

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [*40 CFR §122.41(l)(7)*].

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information [*40 CFR §122.41(l)(8)*].

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the

case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions [*40 CFR §122.41(a)(2)*] [*CWC 13385 and 13387*].

B. Any person may be assessed an administrative penalty by the Regional Water Board or USEPA for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000 [*40 CFR §122.41(a)(3)*].

C. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [*40 CFR §122.41(j)(5)*].

D. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [*40 CFR §122.41(k)(2)*].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural dischargers shall notify the Regional Water Board and USEPA as soon as they know or have reason to believe [*40 CFR §122.42(a)*]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [*40 CFR §122.42(a)(1)*]:

    a. 100 micrograms per liter (µg/L) [*40 CFR §122.42(a)(1)(i)*];

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [*40 CFR §122.42(a)(1)(ii)*];

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [*40 CFR §122.42(a)(1)(iii)*]; or

d. The level established by the Regional Water Board and USEPA in accordance with 40 CFR §122.44(f) [*40 CFR §122.42(a)(1)(iv)*].

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [*40 CFR §122.42(a)(2)*]:

a. 500 micrograms per liter (µg/L) [*40 CFR §122.42(a)(2)(i)*];

b. 1 milligram per liter (mg/L) for antimony [*40 CFR §122.42(a)(2)(ii)*];

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [*40 CFR §122.42(a)(2)(iii)*]; or

d. The level established by the Regional Water Board and USEPA in accordance with 40 CFR §122.44(f) [*40 CFR §122.42(a)(2)(iv)*].

B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board and USEPA of the following [*40 CFR §122.42(b)*]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [*40 CFR §122.42(b)(1)*]; and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [*40 CFR §122.42(b)(2)*].

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [*40 CFR §122.42(b)(3)*].

Attachment E – Monitoring and Reporting Program

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM NO. 7449

The Code of Federal Regulations at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for the point of discharge (Discharge Point 001 [Latitude 33° 54' 45" N, Longitude 118° 31' 15" W]) and shall be located where representative samples of that effluent can be obtained.

B. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.

C. This Regional Water Board and USEPA shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

D. Pollutants shall be analyzed using the analytical methods described in 40 CFR §§136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board or USEPA. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

E. For any analyses performed for which no procedure is specified in the USEPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP".

G. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR §136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

H. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.

I. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

J. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in Section X.C shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.

K. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.

L. In the event that brine waste is transported to a different disposal site during the report period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;

2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

If no brine waste are transported off-site during the reporting period, a statement to that effect shall be submitted.

M. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	Representative of the effluent being discharged from the Facility prior to combining with effluent from Hyperion Wastewater Treatment Plant.

III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

1. The Discharger shall monitor the reverse osmosis brine waste at M-001 as follows:

Table E-2. Monitoring Requirements at M-001

Parameter[1]	Units	Sample Type	Minimum Sampling Frequency
Oil and Grease	mg/L	Grab	Monthly
	lbs/day	Calculated	
PH	Units	Grab	Monthly
Temperature	°F	Grab	Monthly
Total Suspended Solids	mg/L	Grab	Monthly
	lbs/day	Calculated	
Ammonia [3]	mg/L	Grab	Monthly
	lbs/day	Calculated	
Settleable Solids	ml/L	Grab	Monthly
Turbidity	NTU	Grab	Monthly
Salinity	$^0/_{00}$	Grab	Monthly
Remaining Table B Parameters [2, 3]	µg/L	24-hour composite or grab	Semiannually

1 Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Appendix II of the Ocean Plan, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board or USEPA.

2 Parameters contained in Table B of the Ocean Plan, not already specified (ammonia), shall be monitored twice a year, in February and August, respectively. No monitoring is required for acute toxicity.

3 While the chronic toxicity special study is being conducted, additional bimonthly monitoring for these parameters conducted on the combined effluent (waste brine plus Hyperion effluent) is required (with the exception of acute and chronic toxicity and radioactivity). (see section VI.C.2.a. of the Order).

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

Section III.C.4.c of the Ocean Plan, Implementing Provisions for Table B, requires chronic toxicity monitoring for ocean discharges with minimum initial dilution factors of <100:1. No chronic toxicity data is currently available for the combination of brine waste and undisinfected secondary treated effluent discharged from Hyperion Treatment Plant Outfall No. 002. Although the brine waste effluent is subject to two mixing events and this overall dilution may be considered when evaluating chronic toxicity for the West Basin Water Recycling Plant discharge, a review of chronic toxicity levels in the Hyperion effluent suggests the potential for limited assimilative capacity and dilution of the brine waste under certain discharge conditions. Consequently, the Regional Water Board and USEPA are proposing that the permittee, in coordination with the City of Los Angeles, Hyperion Treatment Plant, conduct an 14-month special study to simulate and evaluate chronic toxicity levels of the combined West Basin Water Recycling Plant and Hyperion Treatment Plant effluents following initial mixing with the receiving waterbody, under critical dilution conditions. This information will be reviewed by the Regional Water Board and USEPA

and used to develop additional monitoring requirements and/or WQBELs for effluents discharged through Discharge Point 001 and Hyperion Outfall No. 002.

VI. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

The receiving water monitoring program is not prescribed in this Order as it is covered under the Hyperion Treatment Plant NPDES permit, Monitoring and Reporting Program CI-1492. However, when a regional monitoring program is developed, the Executive Officer and USEPA may require the Discharger to participate in the regional monitoring and/or revise the existing monitoring program.

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

2. If there is no discharge during any reporting period, the report shall so state.

3. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with Waste Discharge Requirements.

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR 136.

5. The Discharger shall attach a cover letter to the Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

6. Semiannual effluent analyses shall be performed during the months of February and August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board and USEPA, state the reason why the monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of monthly and semiannual analyses shall be reported in the quarterly monitoring report as specified in Table E-3 below.

7. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this monitoring program using approved analytical methods, the results of those analyses shall be reported. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.

8. The Discharger shall inform the Regional Water Board and USEPA well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

9. The Discharger shall submit to the Regional Water Board and USEPA, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs in accordance with the requirements described in subsection B.5 below. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal..

2. The Discharger shall submit quarterly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. Quarterly reports shall be due on May 15, August 15, November 15, and February 15 following each calendar quarter.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-3. Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Monthly	**First day of calendar month following permit effective date.**	1st day of calendar month through last day of calendar month	Submit with quarterly SMRs that are due on May 15 (1st quarter) August 15 (2nd quarter) November 15 (3rd quarter) February 15 (4th quarter)
Semiannually	**January 1 following permit effective date**	January 1 through June 30 July 1 through December 31	August 15 February 15

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR 136.

   For each numeric effluent limitation identified in Table B of the 2005 Ocean Plan, the Discharger shall select one or more Minimum Levels (ML) and their associated analytical methods from Appendix II of the 2005 Ocean Plan (Appendix II). Any deviation from MLs in Appendix II must be approved by the Regional Water Board and/or the State Water Board. The "reported" ML is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from Appendix II.

   The Discharger must select all MLs from Appendix II that are below the effluent limitation. If the effluent limitation is lower than all the MLs in Appendix II, the Discharger must select the lowest ML from Appendix II.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The *estimated chemical concentration of the sample shall also be reported.

   For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. The Discharger shall submit hard copy SMRs when required by subsection B.1 above in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

   c. SMRs must be submitted to the Regional Water Board and USEPA, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below: (Reference the reports to Compliance File No. CI-7449 for the Regional Water Board submittals to facilitate routing to the appropriate staff and file.)

      California Regional Water Quality Control Board
      Los Angeles Region
      320 W. 4th Street, Suite 200
      Los Angeles, CA 90013
      Attention: Information Technology Unit

Regional Administrator
U.S. Environmental Protection Agency, Region IX
DMR/NPDES, Mail Code: WTR-7
75 Hawthorne Street
San Francisco, CA 94105

C. Discharge Monitoring Reports (DMRs)

1. As described in SectionVIII.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Report (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR to USEPA and one copy of the DMR to the State Water Board, respectively, to the address listed below:

   State Water Resources Control Board
   Discharge Monitoring Report Processing Center
   Post Office Box 671
   Sacramento, CA 95812

   Regional Administrator
   U.S. Environmental Protection Agency, Region IX
   DMR/NPDES, Mail Code: WTR-7
   75 Hawthorne Street
   San Francisco, CA 94105

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

D. Other Reports

1. **Annual Summary Report**

   By March 1 of each year, the Discharger shall submit an annual report to the Regional Water Board and USEPA. The report shall contain the following:

   a. Both tabular and graphical summaries of the monitoring data obtained during the previous year,

   b. A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,

   c. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.

2. **Chronic Toxicity Special Study Report**

   A full laboratory report for all toxicity testing and the analytical results for all monitored parameters specified by the MRP for the combined effluent shall be submitted as an attachment to the SMR (submitted quarterly) for the month in which the toxicity test is conducted and shall include: the toxicity test results (as TUc = 100/NOEC, NOEC, TUc = 100/EC25 or IC25, EC25 or IC25, and PE) reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations. A final report summarizing the results and conclusions of this 14-month special study shall be submitted 18 months following the date of workplan approval by the Executive Officer and Director.

3. As discussed in Section VII.A.9 of the MRP, Attachment E, the Discharger shall submit to the Regional Water Board and USEPA, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

4. If the Discharger wishes to participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to the Pacific Ocean, then the Discharger shall submit a report seeking approval of the Regional Water Board and USEPA.

5. This Regional Water Board and USEPA requires the Discharger to file with the Board and USEPA, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

   a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.

   b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.

   c. Describe facilities and procedures needed for effective preventive and contingency plans.

   d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

   This Regional Water Board and USEPA, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the Discharger.

Attachment F – Fact Sheet

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List of Tables

ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	**4B190137001**
Discharger	**West Basin Municipal Water District**
Name of Facility	**West Basin Water Recycling Plant, El Segundo**
Facility Address	**1935 Hughes Way**
	El Segundo, CA 90245
	Los Angeles County
Facility Contact, Title and Phone	**Uzi Daniel, Water Quality Analyst, (310) 660-6245**
Authorized Person to Sign and Submit Reports	**Richard Nagel, Water Quality Manager**
Mailing Address	**17140 South Avalon Blvd., Carson, CA 90746**
Billing Address	**1935 Hughes Way, El Segundo, CA 90245**
Type of Facility	**Water Recycling Facility**
Major or Minor Facility	**Major**
Threat to Water Quality	**3**
Complexity	**C**
Pretreatment Program	**No**
Reclamation Requirements	**N/A**
Facility Permitted Flow	**4.5 million gallons per day (MGD) discharge of waste brine**
Facility Design Flow	**4.5 MGD**
Watershed	**Santa Monica Bay**
Receiving Water	**Pacific Ocean**
Receiving Water Type	**Ocean**

A. West Basin Municipal Water District (hereinafter Discharger) is the owner and operator of the West Basin Water Recycling Plant (hereinafter Facility).

B. The Facility discharges reverse osmosis brine waste to the Pacific Ocean, a water of the United States and is currently regulated by Order No. 00-091 which was adopted on June 29, 2000 and expired on May 10, 2005. The terms of the existing Order automatically continued in effect after the permit expiration date.

C. The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its WDRs and NPDES permit on January 11, 2005. Supplemental Information was requested on November 7, 2005 and received on November 8, 2005. A site visit was conducted on November 7, 2005, to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Discharger operates the West Basin Water Recycling Plant located at 1935 Hughes Way, El Segundo, California. The Facility provides additional treatment to a portion of the secondary treated wastewater from the City of Los Angeles Hyperion Treatment Plant (Hyperion) for use as Title 22 irrigation water; boiler feedwater for Chevron, El Segundo Refinery boilers; and for use in the West Coast Basin Barrier Project. The Facility has a total design capacity of 37.5 MGD and discharges approximately 2.75 MGD of reverse osmosis brine waste from the treatment process to the Pacific Ocean via the Hyperion 5-mile outfall. Brine waste is not treated prior to discharge.

The Discharger began an expansion project at the Facility in September 2005 to increase the amount of recycled water for the West Coast Basin Barrier Project from 7.5 MGD to 12.5 MGD and increase the capacity of the Title 22 process train from 30 MGD to 40 MGD. The Discharger has requested an increase of flow for the discharge of brine waste, from 2.75 MGD to 4.5 MGD to accommodate the expansion.

Effluent from the Facility combines with effluent from Hyperion prior into the Pacific Ocean via Hyperion 5-mile outfall. Annual effluent flows from Hyperion are approximately 330 MGD. The deep ocean outfall provides an initial dilution of 84 parts seawater to 1 part effluent (84:1).

A. Description of Wastewater and Biosolids Treatment or Controls

The Facility currently has a total design capacity of 37.5 MGD and produces recycled water using two treatment processes: Title 22 and Barrier.

Under the Title 22 treatment process the Facility distributes water to a Title 22 distribution system for landscape, irrigation, and industrial purposes. The Title 22 process can treat up to 30 MGD of secondary-treated wastewater from the Hyperion Treatment Plant. The Title 22 process uses coagulation, flocculation, high rate clarifiers, monomedia anthracite coal filtration, and chlorine disinfection. All wastewater from this process is returned back into the system.

The Barrier treatment process currently treats up to 7.5 MGD of secondary-treated wastewater for blending with potable water and injection into the West Coast Basin Barrier Project. Trains 1 and 2 of the Barrier treatment process currently consist of pre-decarbonation, lime clarification, recarbonation, multi-media filtration, reverse osmosis, post decarbonation, pH adjustment, and chlorination. Train 3 currently consists of micro filtration, reverse osmosis, post decarbonation, chlorination, and pH adjustment. Up to 2.75 MGD of brine waste generated from the reverse osmosis process is discharged to the Pacific Ocean. During the expansion project, the lime clarifier and the tri-media filter will be removed from the barrier treatment process. The lime clarifier will be converted to a solids contact basin and the tri-media filters will be used for Title 22 irrigation water. Chlorination will be replaced with UV treatment and additional pumping facilities will be constructed. These changes will increase the treatment capacity from 30 to 40 MGD of recycled water.

The Facility operates a boiler feedwater treatment process for the Chevron, El Segundo Refinery, low and high-pressure boilers. This treatment process includes micro filtration, reverse osmosis, decarbonation, and a second treatment by reverse osmosis prior to being distributed to the refinery. The boiler feedwater treatment process produces approximately 0.81 MGD of brine waste that is discharged to the Pacific Ocean. A flow diagram of the existing treatment process and future treatment process is provided in Attachment C of Order No. R4-2006-0067.

B. Discharge Points and Receiving Waters

Reverse osmosis brine waste from the Facility is discharged through Discharge Point 001 (33° 54' 43" North, 118° 31' 17" West), to the Pacific Ocean, that corresponds to the Hyperion 5-mile outfall (Outfall No. 002). A location map of the Facility is provided in Attachment B of Order No. R4-2006-0067.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Numerical effluent limitations are not contained in the previous Order for discharges from Discharge Point 001. The previous Order required that wastes discharged shall be limited to brine waste generated from the operation of reverse osmosis processes at West Basin Water Recycling Plant.

Parameters detected in the effluent (Monitoring Location M-001) from the term of the previous Order are summarized in Table F-2.

Table F-2. Summary of SMR Data (Discharge Point 001)

Parameter	Unit	Highest Reported Value
Antimony	µg/L	25.9
Arsenic	µg/L	69.1
Cadmium	µg/L	5.6
Chromium (III)	µg/L	172.6
Chromium (VI)	µg/L	2.9
Copper	µg/L	158
Lead	µg/L	34.2
Mercury	µg/L	1.41
Nickel	µg/L	126
Selenium	µg/L	69.1
Silver	µg/L	5.54
Zinc	µg/L	279
Cyanide	µg/L	80
Acrolein	µg/L	33
Benzene	µg/L	18
Tribromomethane (Bromoform)	µg/L	8.6
Dibromochloromethane	µg/L	13
Chloroform	µg/L	33
Bromodichloromethane	µg/L	8.9
Methylene chloride	µg/L	10
Tetrachloroethylene	µg/L	33
Toluene	µg/L	4.8
1,1,1-Trichloroethane	µg/L	1.7
Trichloroethylene	µg/L	1.2
Phenol	µg/L	77
2,4,6-Trichlorophenol	µg/L	1.1
1,2-Dichlorobenzene	µg/L	1.4

Parameter	Unit	Highest Reported Value
1,3-Dichlorobenzene	µg/L	12
1,4-Dichlorobenzene	µg/L	12
Di-n-Butyl phthalate	µg/L	3.8
Isophorone	µg/L	1.2
Nitrobenzene	µg/L	0.76
N-Nitrosodimethylamine	µg/L	5
alpha-BHC	µg/L	0.03
beta-BHC	µg/L	0.1
gamma-BHC	µg/L	0.08
delta-BHC	µg/L	0.055
Endrin	µg/L	0.05
Total Chromium	µg/L	173
pH	pH unit	7.5
Suspended Solids	mg/L	14
Temperature	Deg. C	30
Oil and Grease	mg/L	5.3
BOD_5 @ 20 deg. C	mg/L	21
Turbidity	NTU	18
Settleable Solids	ml/L	<0.1
Ammonia (as N)	mg/L	500
Gross beta activity	pCi/L	243
Net beta activity	pCi/L	205.4
HCH (sum of isomers)	µg/L	0.1
Dichlorobenzenes (total)	µg/L	24.79
Halomethanes (total)	µg/L	48.7

D. Compliance Summary

The Facility is not subject to effluent limitations under Order No. 00-091. No effluent exceedances were identified.

E. Planned Changes

The Discharger began an expansion project at the Facility in September 2005 to increase the amount of recycled water for the West Coast Basin Barrier Project from 7.5 MGD to 12.5 MGD and increase the capacity of the Title 22 process train from 30 MGD to 40 MGD. The Discharger has requested an increase of flow for the discharge of brine waste, from 2.75 MGD to 4.5 MGD to accommodate the expansion. Additional information regarding the expansion project of the Facility is contained in Section II.A of this Fact Sheet.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the Federal CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the CWC. It shall serve as a NPDES permit pursuant to section 402 of the Federal CWA for point source discharges from this Facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

B. California Environmental Quality Act (CEQA)

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** In accordance with legislative policy set forth in Section 13000 of Division 7 of the CWC, and pursuant to the authority contained in Section 13170 and 13170.2, the USEPA approved the 2005 Ocean Plan on February 14, 2006. The 2005 Ocean Plan amendments were previously adopted by the State Water Resources Control Board on January 20, 2005 and April 21, 2005, and by the California Office of Administrative Law on October 12, 2005. The Ocean Plan was amended to address reasonable potential and Areas of Special Biological Significance. The Ocean Plan contains water quality objectives and beneficial uses for the ocean waters of California. The beneficial uses of State ocean waters to be protected are summarized below:

Table F-3. Beneficial Uses of the Pacific Ocean

Discharge Point	Receiving Water Name	Beneficial Use
001	Pacific Ocean	Industrial Water Supply; Water Contact and Non-Contact Recreation, Including Aesthetic Enjoyment; Navigation; Commercial and Sport Fishing; Mariculture; Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS); Rare and Endangered Species; Marine Habitat; Fish Migration; Fish Spawning and Shellfish Harvesting

In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal waters.

3. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy.

Resolution No. 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution No. 68-16.

4. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR §122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in the Order are at least as stringent as the effluent limitations in the previous Order.

5. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

6. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards become effective for CWA purposes (40 CFR §§131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

7. **401 Certification.** The Regional Water Board has determined that its joint issuance of this NPDES permit with USEPA serves as its certification under Section 401 of the CWA that any discharge pursuant to this permit will comply with the CWA provisions at 33 U.S.C. 1311, 1312, 1313, 1316, and 1317.

8. **Magnuson-Stevens Fishery Conservation and Management Act (MSA) and Endangered Species Act (ESA).** USEPA's reissuance of an NPDES permit is subject to requirements of the MSA and section 7 of the ESA. On February 9, 2004, USEPA requested updated information related to: (1) essential fish habitat and managed and associated species, and (2) threatened and endangered species and their designated critical habitats, in the vicinity of the Hyperion Treatment Plant outfalls from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the Services). Based on this and other relevant information, USEPA is evaluating whether there are effects on essential fish habitat and managed and associated species protected under the MSA, or on threatened and endangered species and their designated critical habitats protected under the ESA. Based on the outcome of this analysis, USEPA may engage in consultation with the Services during, and subsequent to, this permit reissuance. USEPA may decide that changes to the permit are warranted based on the results of the completed consultation, and a reopener provision to this effect has been included in the Order.

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional

Water Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development.

The 2002 State Water Board's California 303(d) List classifies the Santa Monica Bay Offshore/Nearshore as impaired. The pollutants of concern include chlordane (sediment), DDT (tissue and sediment), debris, PAHs (sediment), PCBs (tissue and sediment), and sediment toxicity. In addition, a fish consumption advisory has been established for the receiving water. To date no TMDLs have been developed; therefore, no conditions in the proposed Order are based on TMDLs.

Data submitted to the Regional Water Board pursuant to MRP No. 7449 do not indicate any detectable levels of pollutants for which the receiving water is listed an impaired. The Discharger is not expected to contribute to the impairment of the receiving water.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established. Three options exist to protect water quality: 1) 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

Mass-based effluent limitations are established to ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR §122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Ocean Plan, CWC, and previous permit provisions, and are consistent with the requirements set for other discharges regulated by NPDES permit to the Pacific Ocean.

B. Technology-Based Effluent Limitations

1. Scope and Authority

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR §125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR §125.3.

2. Applicable Technology-Based Effluent Limitations

At the time of drafting of this permit, no ELGs applicable to the Discharger have been developed. Technology-based effluent limitations in this Order are established in accordance with 40 CFR §125.3 and based on Table A of the Ocean Plan. Technology-based effluent limitations contained in Table A of the Ocean Plan are applied directly to the Discharger's total effluent. Effluent limitations for oil and grease, suspended solids, settleable solids, turbidity, and pH are established in Table A of the Ocean Plan.

The effluent limitations contained in Section III.B, Table A of the 2005 Ocean Plan serve as the technology-based effluent limitations, in order to carry out the purposes and intent of the CWA.

Table F-4. Summary of Technology-based Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations[1]				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	25	40	--	75	--
pH	Units	--	--	--	6.0	9.0
Suspended Solids	mg/L	60[2]	--	--	--	--
Settleable Solids	ml/L	1.0	1.5	--	3.0	--
Turbidity	NTU	75	100	--	225	--

[1] Based on the requirements specified in Table A of the Ocean Plan

[2] Notes for Table A of the Ocean Plan state, "Suspended Solids: Discharger shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L. Because the monthly effluent limitation for suspended solids has been established at 60 mg/L, the Discharger is not required to remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in 40 CFR §122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary, as required in Section III.C.2 of the Ocean Plan, is intended to protect the designated uses of the receiving water and achieve applicable water quality objectives and criteria as specified in the Ocean Plan. The specific procedures for determining reasonable potential for discharges from the Facility and if necessary for calculating WQBELs, are contained in Appendix VI of the the Ocean Plan (as amended in 2005).

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section III.C.1 of this Fact Sheet, the State Water Board adopted an Ocean Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Ocean Plan. The beneficial uses applicable to the Pacific Ocean are summarized in Section III.C.1 of this Fact Sheet. The Ocean Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Table B of the Ocean Plan includes the following water quality objectives for toxic pollutants and whole effluent toxicity:

a. 6-month median, daily maximum, and instantaneous maximum water quality objectives for 21 chemicals and chemical characteristics, for the protection of marine aquatic life.

b. 30-day average objectives for 20 non-carcinogenic chemicals for the protection of human health.

c. 30-day average objectives for 42 carcinogenic chemicals for the protection of human health.

d. Daily maximum objectives for acute and chronic toxicity.

3. Determining the Need for WQBELs

Order No. 00-091 did not contain effluent limitations for non-conventional and toxic pollutant parameters in Table B of the Ocean. For Order No. R4-2006-0067, the Regional Water Board and USEPA re-evaluated the need for WQBELs based on water quality objectives contained in Section II.D.7.b, Table B of the Ocean Plan in accordance with 40 CFR §122.44(d) and guidance for statistically determining the “reasonable potential” for a discharged pollutant to exceed an objective, as outlined in Appendix VI of the Ocean Plan. The statistical approach combines knowledge of effluent variability (as estimated by a coefficient of variation) with the uncertainty due to a limited amount of effluent data to estimate a maximum effluent value at a high level of confidence. This estimated maximum effluent value is based on a lognormal distribution of daily effluent values. Projected receiving water values (based on the estimated maximum effluent value or the reported maximum effluent value and minimum probable initial dilution), can then be

compared to the appropriate water quality objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. According to the RPA Procedure (Appendix VI) of the Ocean Plan, the RPA can yield three endpoints:

a) Endpoint 1, an effluent limitation is required and monitoring is required;
b) Endpoint 2, an effluent limitation is not required and the Regional Water Board may require monitoring; and
c) Endpoint 3, the RPA is inconclusive, monitoring is required, and an existing effluent limitation may be retained or a permit reopener clause may be included to allow inclusion of an effluent limitation if future monitoring warrants the inclusion.

Based on the RPA Procedure, ammonia demonstrated reasonable potential to exceed water quality objectives contained in the Ocean Plan; therefore, an effluent limitation for ammonia is established in Order No. R4-2006-0067.

The Regional Water Board conducted a conservative initial RPA screen for all parameters in Table B of the Ocean Plan. The Regional Water Board used the RPcalc 2.0 software tool developed by the State Water Board for conducting RPAs, effluent data submitted to the Regional Water Board for the period from January 2000 through September 2005, and the dilution credit applicable to the ocean outfall (84:1) to conduct the initial RPA screen. The initial screen is more conservative than a full RPA because it only considers the maximum effluent concentrations reported by the Discharger and does not consider the dilution applicable to the combining Hyperion effluent. A parameter that did not indicate reasonable potential during the initial screen would not demonstrate reasonable potential during a full RPA that considered additional dilution provided by the combining Hyperion effluent waste stream. The initial screen identified ammonia (as N) as possibly demonstrating reasonable potential to exceed water quality objectives. The screens also identified three parameters in which the analytical detection levels were higher than the water quality objectives; thus the RPAs were inconclusive and additional monitoring is required for heptachlor, PAHs, and PCBs. Data were not available for all parameters listed in Table B of the Ocean Plan. Monitoring requirements have been established all Table B parameters to assess reasonable potential in the future. The Regional Water Board in consultation with USEPA conducted a full and complete RPA for ammonia to determine reasonable potential. The full RPA considered the dilution available with the combining Hyperion effluent waste stream (as described in Section IV.C.4 of this Fact Sheet).

The Regional Water Board and USEPA determined that effluent from West Basin Water Recycling Plant, when discharged through Discharge Point 001, demonstrates reasonable potential to exceed Ocean Plan objectives for ammonia. All other parameters contained in Table B of the Ocean Plan (with the exception of heptachlor, PAHs, and PCBs) did not demonstrate reasonable potential to cause, contribute to, or deviate from water quality objectives. Thus numerical effluent limitations for these parameters are not prescribed. Instead, a narrative limit statement to comply with all Ocean Plan objectives requirement is provided.

Taking into consideration of the very large dilution credit of the Hyperion Outfall 002 (84:1), the temperature of waste discharged was set at 100°F based on BPJ.

4. **WQBEL Calculations**

Effluent from West Basin Water Recycling Plant undergoes two mixing events during discharge into the Pacific Ocean. The first mixing event occurs when the effluent from West Basin combines with effluent from the Hyperion Treatment Plant. The second mixing event occurs during the actual discharge to the Pacific Ocean through the diffuser on the ocean outfall. Because the effluent from the West Basin Water Recycling Plant undergoes two mixing events during its discharge, both mixing events must be considered when determining reasonable potential and developing an effluent limitation.

The first step in determining reasonable potential and calculating an effluent limitation is determining the WQBELs for the dilution offered by the ocean outfall diffuser (84:1).

Effluent limitations for all pollutants, except for acute toxicity (if applicable) and radioactivity are calculated in accordance with the following equation and are based on the water quality objectives contained in Section II.D.7.b of the Ocean Plan, Table B:

$$Ce = Co + Dm (Co - Cs)$$

where:
Ce = the effluent limitation (µg/L)
Co = the water quality objective to be met at the completion of initial dilution (µg/L)
Cs = background seawater concentration (µg/L)
Dm = minimum probable initial dilution expressed as parts seawater per part wastewater

The effluent limitation for acute toxicity is calculated according to the following equation:

$$Ce = Co + (0.1) Dm (Co)$$

where all variables are as indicated above. This equation applies only when Dm > 24.

The Dm is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure.

Prior to issuance of Order No. 00-091, the State Water Board had determined the minimum initial dilution factor, Dm, for the Hyperion Outfall 002 (5-mile outfall) to be 84 to 1. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

Site-specific water quality data are not available; therefore, in accordance with Section III.C, Table C, Implementation Provisions for Table B Water Quality Objectives, Cs equals zero for all pollutants, except the following:

Table F-5. Background Seawater Concentrations

Pollutant	Background Seawater Concentration
Arsenic	3 µg/L
Copper	2 µg/L
Mercury	0.0005 µg/L
Silver	0.16 µg/L
Zinc	8 µg/L

WQBELS based only on the dilution provided by the final outfall diffuser for ammonia are determined as follows:

Water quality objectives from the Ocean Plan are:

Table F-6. Ammonia Ocean Plan Objectives

Pollutant	6-Month Median	Daily Maximum	Instantaneous Maximum
Ammonia	0.6 mg/L	2.4 mg/L	6.0 mg/L

No background concentration of ammonia is credited for receiving water. Using the equation, Ce = Co + Dm (Co – Cs), water quality effluent limitations (based only on the dilution offered by the outfall diffuser) are calculated as follows:

Ammonia (first mixing event)

Ce = 0.6 + 84 (0.6 – 0) = 51 mg/L (6-Month Median)
Ce = 2.4 + 84 (2.4 – 0) = 204 mg/L (Daily Maximum)
Ce = 6 + 84 (6 – 0) = 510 mg/L (Instantaneous Maximum)

The second step in determining reasonable potential and calculating an effluent limitation is determining the dilution as a result of effluent from the Facility mixing with effluent from the Hyperion Treatment Plant. Having calculated the water quality effluent limitations for one of the mixing events, the dilution occurring during the mixing event with the Hyperion effluent is considered. Dilution credits for the mixing of the West Basin effluent and Hyperion effluent were calculated in the previous permit based on a simple flow ratio of the Hyperion average flow and the West Basin effluent maximum flow to equal a dilution of 120. This dilution is revised in the current permit based on new flow data, increased West Basin capacity, and the consideration of the monthly worst case flow scenario (to provide a conservative result that will be protective of water quality).

The previous permit multiplied the dilution factor provided from the outfall diffuser by the dilution factor calculated for the Hyperion effluent and West Basin effluent ratio to determine the overall dilution credit and determine reasonable potential (and establish effluent limitations if it were necessary). In Order No. R4-2006-0067, the two dilution factors are not multiplied together; however a single WQBEL is calculated considering both dilution factors. This process allows for the background concentrations of pollutants in the Hyperion effluent to be accounted for in the final WQBEL.

Hyperion effluent data for the period from January 1999 through April 2005 were reviewed and the lowest monthly average flow value was identified as the worst case flow scenario (the low flow offers the least amount of dilution). The lowest monthly average flow for the

period from January 1999 through April 2005 was 296 MGD(August 2003). As noted in Section II of this Fact Sheet, the capacity of the West Basin Water Recycling Plant is increasing, which results in an increased brine waste discharge volume from the Facility of 4.5 MGD. A ratio of the Hyperion effluent (lowest monthly average) to the West Basin effluent (maximum discharge capacity) results in a conservative dilution ratio which addresses simultaneous low-flow conditions from Hyperion and maximum flow conditions from West Basin. The expected dilution (296 MGD: 4.5 MGD) results in a dilution factor of 65.78.

Hyperion effluent data for the period from January 1999 through April 2005 were reviewed for ammonia. The maximum effluent concentration reported for ammonia was 39.6 mg/L. RPcalc 2.0 software was used to calculate the one-sided upper confidence bound [95% for the 95th population percentile] value of 45 mg/L. Thus, assuming an ammonia background concentration of 45 mg/L in the Hyperion effluent is conservative based on the data available.

The final step is to calculate the final WQBELs, which consider both of the dilution events. The formula provided in Section III.C.4.a of the Ocean Plan, Ce = Co + Dm (Co – Cs), must once again be used. However, the variables must be revised to account for the dilution occurring at the outfall diffuser. The water quality objectives (Co) are now equal to the WQBELs calculated for the outfall diffuser only. The initial dilution (Dm) must be revised to reflect the dilution provided by the Hyperion effluent (65.78). The pollution background concentration (Cs) must now reflect the pollution background concentration in the Hyperion effluent (45 mg/L).

The revised water quality objectives (Co) are:

Table F-7. Revised Water Quality Objectives (based on dilution provided by outfall diffuser)

Pollutant	6-Month Median	Daily Maximum	Instantaneous Maximum
Ammonia	51 mg/L	204 mg/L	510 mg/L

Ammonia (second mixing event)

Ce = 51 + 65.78 (51 – 45) = 446 mg/L (6-Month Median) [450 mg/L]
Ce = 204 + 65.78 (204 – 45) = 10,663 mg/L (Daily Maximum) [11,000 mg/L]

5. **Final WQBELs**

Final WQBELs were calculated based on the water quality objectives contained in the Ocean Plan. The WQBEL calculations considered the dilution from the final outfall diffuser, the minimal likely dilution provided by the combining Hyperion effluent, and the maximum effluent concentration of ammonia in the Hyperion effluent. Summaries of the WQBELs are described below in Table F-8.

Table F-8. Summary of WQBELs for Discharge Point 001

Parameter	Units	6-Month Median	Daily Maximum
Ammonia	mg/L	450	11,000

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR §122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders. The previous Order did not contain any numerical effluent limitations. Effluent limitations for oil and grease, suspended solids, settleable solids, turbidity, and pH have been established to reflect technology-based effluent limits contained in the Ocean Plan. In addition, the effluent limitations for ammonia have been added to this Order because the Facility demonstrates reasonable potential to exceed water quality objectives contained in the 2005 Ocean Plan. An effluent limitation for temperature has been established based on the requirements of the Thermal Plan.

1. Mass-based Effluent Limitations

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)
where: Mass = mass limitation for a pollutant (lbs/day)
Effluent limitation = concentration limit for a pollutant (mg/L)
Flow rate = discharge flow rate (MGD)

Table F-9. Summary of Final Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitations						Basis
		6-Month Average	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Oil and Grease	mg/L	--	25	40	--	--	75	OP [1]
	lbs/day [2]	--	940	1,500	--	--	2,800	
pH	standard units	--	--	--	--	6.0	9.0	OP
Temperature	°F	--	--	--	100 [5]	--	--	OP
Total Suspended Solids	mg/L	--	60 [3]	--	--	--	--	OP
	lbs/day [2]	--	2,300	--	--	--	--	
Ammonia	mg/L	450	--		11,000	--	--	OP [4]
	lbs/day [2]	17,000	--		410,000	--	--	
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0	OP
Turbidity	NTU	--	75	100	--	--	225	OP

[1] Based on the requirements specified in Table A of the Ocean Plan

[2] Based on a maximum flow of 4.5 MGD.

[3] Table A of the Ocean Plan states, "Suspended Solids: Discharger shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L. Because the monthly effluent limitation for suspended solids has been established at 60 mg/L, the Discharger is not required to remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean.

[4] Based on the water quality objectives specified in Table B of the Ocean Plan.

[5] The temperature of waste discharged shall not exceed 100°F, which takes into account the very large dilution credit based upon BPJ.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Ocean Plan contains numeric and narrative water quality objectives applicable to the territorial marine waters of the State to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Ocean Plan.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Water Boards to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring

[Not Applicable]

B. Effluent Monitoring

To determine compliance with effluent limitations, determine compliance with Ocean Plan requirements, and collect data for future permit renewal, the proposed monitoring plan carries forward monitoring requirements from Order No. 00-091 with some modifications. Monitoring for pollutants in the final effluent prior to discharge from Discharge Point 001, is required to determine compliance with effluent limitations contained is Section IV.A.1.a of the permit. However, for parameters in which the data submitted to the Regional Water Board and USEPA indicate that the discharge did not demonstrate reasonable potential to exceed water quality objectives, the monitoring frequencies have been reduced. Semi-annual monitoring requirements for all Table B parameters is established to determine reasonable potential to exceed water quality objectives contained in the Ocean Plan. During the term of Order No. 00-091, the Discharger did not submit data for total chlorine residual, chlorinated phenolics, thallium, tributyltin, acrylontrile, aldrin, benzidine, bis (2-chloroethyl) ether, bis (2-ethylhexyl) phthalate, chlorodane, chlorodibromethane, DDT, 3,3-dichlorobenzidine, dichlorobromomethane, dieldrin, 1,2-diphenylhydrazine, heptachlor epoxide, hexachlorobenzene, n-nitrosodi-N-propylamine, n-nitro-sodi-phenylamine, TCDD equivalents, and toxaphene. These parameters are included in Table B of the Ocean Plan and shall be monitored semi-annually as required in the MRP (Attachment E).

The type of sample required for monthly sampling has been revised from a 24-hour composite to grab. The discharge is composed of reverse osmosis brine waste and is not expected to contain much variability. Because the discharge is not expected to change much throughout the day, a grab sample is considered representative of the effluent. Further, grab samples are more cost-effective and may eliminate unnecessary monitoring costs.

C. Whole Effluent Toxicity Testing Requirements

Section III.C.4.c of the Ocean Plan, Implementing Provisions for Table B, requires chronic toxicity monitoring for ocean discharges with minimum initial dilution factors of <100:1. No chronic toxicity data is currently available for the combination of brine waste and undisinfected secondary treated effluent discharged from Hyperion Treatment Plant Outfall No. 002. Although the brine waste effluent is subject to two mixing events and this overall dilution may be considered when evaluating chronic toxicity for the West Basin Water Recycling Plant discharge, a review of chronic toxicity levels in the Hyperion effluent suggests the potential for limited assimilative capacity and dilution of the brine waste under certain discharge conditions. Consequently, the Regional Water Board and USEPA are proposing that the permittee, in coordination with the City of Los Angeles, Hyperion Treatment Plant, conduct an 14-month special study to simulate and evaluate chronic toxicity levels of the combined West Basin Water Recycling Plant and Hyperion Treatment Plant effluents following initial mixing with the receiving waterbody, under critical dilution conditions. This information will be reviewed by the Regional Water Board and USEPA and used to develop additional monitoring requirements and/or WQBELs for effluents discharged through Discharge Point 001 and Hyperion Outfall No. 002.

D. Receiving Water Monitoring

1. Surface Water

Site-specific receiving water monitoring requirements have not been established in the Monitoring and Reporting Program. Receiving water monitoring is currently being conducted by Hyperion Wastewater Treatment Plant (CI-1492) for the receiving water around the outfall diffuser, and data to determine compliance with receiving water limitations will continue to be readily available. The Discharger is encouraged to participate and contribute to the receiving water monitoring conducted by Hyperion.

Ocean-specific Regional Monitoring requirements may be required by the Discharger if determined by the Executive Officer and USEPA Water Division Director.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions

Standard Provisions, which in accordance with 40 CFR §§122.41and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

2. Regional Water Board Standard Provisions

Regional Water Board Standard Provisions are based on the CWA, USEPA regulations, and the CWC.

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 CFR Part 123 and the previous Order. The Regional Water Board and USEPA may reopen the permit to modify permit conditions and requirements. Causes for modifications include, but are not limited to, the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Ocean Plan.

2. Special Studies and Additional Monitoring Requirements

a. Chronic Toxicity Special Study

No chronic toxicity data is currently available for the combination of brine waste and undisinfected secondary treated effluent discharged from Hyperion Treatment Plant Outfall No. 002. The Regional Water Board and USEPA are proposing that the permittee, in coordination with the City of Los Angeles, Hyperion Treatment Plant, conduct an 14-month special study to simulate and evaluate chronic toxicity levels of the combined West Basin Water Recycling Plant and Hyperion Treatment Plant effluents following initial mixing with the receiving waterbody, under critical dilution conditions. This information will be reviewed by the Regional Water Board and USEPA and used to develop additional monitoring requirements and/or WQBELs for effluents discharged through Discharge Point 001 and Hyperion Outfall No. 002.

3. Best Management Practices and Pollution Prevention

The previous Order required the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP) and a storm water monitoring plan as specified under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities, Order No. 97-03-DWQ (General Permit). This Order will require the Discharger to update and continue to implement, as specified in the existing Order requirements, a SWPPP and monitoring program, consistent with the General Permit. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water in the undiked areas, and that all contaminated storm water within the diked areas is not discharged to a receiving water or storm drain.

This provision is based on 40 CFR § 122.44(k) and Provision D.10 of Order No. 00-091 and specifies the requirement to develop and maintain a SWPPP.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for West Basin Water Recycling Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board and USEPA have notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements and a federal NPDES permit for the discharge and have provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the local newspaper, *South Bay Daily Breeze,* on May 19, 2006.

B. Written Comments

The Regional Water Board staff and USEPA determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs and draft NDPES permit during the public comment period.

Although the public comment period will remain open through the close of the Regional Water Board public hearing on July 13, 2006, persons commenting on the Order are strongly encouraged to submit their comments in writing by 5:00 p.m. on June 19, 2006, to facilitate consideration of the comments by the Regional Water Board and USEPA.

Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board, at the address above on the cover page of this Order, and the U.S. Environmental Protection Agency; Region IX, WTR-5; 75 Hawthorne Street, San Francisco, CA 91405.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: July 13, 2006
Time: 9:00 a.m
Location: Simi Valley, Council Chambers
2929 Tapo Canyon Road
Simi Valley, California

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

The Regional Water Board will not be adopting the NPDES permit at the July 13, 2006 public hearing, but will formally act on the permit at a subsequent Board meeting.

Please be aware that dates and venues may change. Our web address is **http://www.waterboards.ca.gov/losangeles** where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions and Federal NPDES Permit Petitions

This Order shall first be adopted by the Regional Water Board and then issued by USEPA as a federal NPDES permit. USEPA's issuance consists of the service of notice of the Regional Administrator's decision. This permit will become effective 33 days following the date it is mailed to the Discharger by USEPA, unless a request for review is filed.

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

Pursuant to 40 CFR Part 124, a petition may be filed with the Environmental Appeals Board (EAB) to review any conditions of the federal NDPES permit decision. If a request for review is filed, only those conditions which are uncontested will go into effect pending disposition of the request for review. Requests for review must be filed within 33 days following the date the final permit is mailed and must meet the requirements of 40 CFR Part 124.19. Requests for review should be addressed to the EAB, as follows. Requests sent through the U.S. Postal Service (except by Express Mail) must be addressed to the EAB's mailing address, which is:

U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001.

All filings delivered by hand or courier, including Federal Express, UPS, and U.S. Postal Express Mail, should be directed to the following address:

Environmental Appeals Board
U.S. Environmental Protection Agency
Colorado Building
1341 G Street, N.W., Suite 600
Washington, D.C. 20460.

Those persons filing a request for review must have filed comments on the draft permit. Otherwise, any such requests for review may be filed only to the extent of changes from the draft to the final permit decision.

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address below at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

U.S. Environmental Protection Agency, Region IX
CWA Standards and Permits Office (WTR-5)
75 Hawthorne Street
San Francisco, CA 94105

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this Facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Dr. Jau Ren Chen at (213) 576-6656, at the Regional Water Board, and Ms. Robyn Stuber at (415) 972-3524, at USEPA.